

# PAWS Science Performance Level Descriptors

## For Grades 4, 8, and 11

**Advanced:** Advanced science students demonstrate a thorough understanding of the nature of science. They make connections among unifying concepts and processes to explain the natural world. These students use the inquiry process to analyze and synthesize scientific information to generate new questions. They construct scientific knowledge independently and apply their knowledge of science in complex situations to communicate appropriate conclusions and explanations. They demonstrate an understanding of the appropriate use of a variety of scientific procedures and tools.

**Proficient:** Proficient science students demonstrate an understanding of the nature of science. They identify and apply unifying concepts and processes to explain the natural world. These students use the inquiry process to generate, validate, and apply scientific information to a variety of situations to communicate appropriate conclusions and explanations. They demonstrate an understanding of the appropriate use of a variety of scientific procedures and tools.

**Basic:** Basic science students demonstrate a limited understanding of the nature of science. They demonstrate the ability to identify some of the concepts and processes that explain the natural world. These students demonstrate a limited ability to use the inquiry process to generate or validate scientific information or to communicate appropriate conclusions and explanations. They demonstrate a limited understanding of the appropriate use of scientific procedures and tools.

**Below Basic:** Below basic science students demonstrate little or no understanding of the nature of science. They demonstrate a limited ability to identify concepts and processes that explain the natural world. These students demonstrate little or no ability to use the inquiry process to generate or validate scientific information or to communicate appropriate conclusions and explanations. They demonstrate little or no understanding of the appropriate use of scientific procedures or tools.